UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/756,899	01/14/2004	Randall L. Powers	100.401US01	3088

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EXAMINER
BOAKYE, ALEXANDER O

ART UNIT	PAPER NUMBER
2616	

NOTIFICATION DATE	DELIVERY MODE
01/11/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@fogglaw.com

	Application No.	Applicant(s)
Office Action Summary	10/756,899	POWERS, RANDALL L.
	Examiner	Art Unit	
	ALEXANDER BOAKYE	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _14 January 2004_.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-47_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☒ Claim(s) _14,20-25 and 43-47_ is/are allowed.

6) ☒ Claim(s) _1-13,15-19,26-42_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a
foreign country or in public use or on sale in this country, more than one year
prior to the date of application for patent in the United States.

Claims 1-13, 15-19, 26-42 are rejected under 35 U.S.C. 102(b) as being

anticipated by LOO (WO 99/26448).

Regarding claims 1, LOO teaches a method for automatically adapting to

statically varying packet size the method (Fig. 1-3) comprising: identifying a first

boundary (column 10, lines 31-32 and column 11, lines 1-3; cell 10 of Fig. 1A

corresponds to the claimed first boundary); identifying a second boundary (column 11,

lines 3-8; cell 11 of Fig. 1A corresponds to the second boundary); determining the

statically varying packet size based on the first and second boundaries (column 11,

lines 21-25); identifying an additional N boundaries based on the determined packet

size (column 11, lines 21-25); and entering a sync state based on the identification of

the additional N boundaries (column 11,lines 5-8).

Regarding claim 2, LOO further teaches that identifying the first boundary

comprises calculating a header error check (HEC) value and comparing with a received value (column 11, lines 21-25).

Regarding claim 3, WO teaches counting the number of bytes between the first and second boundaries (column 8, lines 28-32 and column 9, lines 1-4).

Regarding claim 4, LOO teaches limiting the counting of bytes after the first boundary to a selected number of bytes (column 8, lines 29-32 and column 9, lines 1-6).

Regarding claim 5, LOO teaches that identifying additional N boundaries comprises identifying an additional N boundaries based on a calculated header error check (HEC) value (column 11, lines 21-25).

Regarding claim 6, LOO teaches returning to the identifying of the first boundary to resynchronize when a selected number of boundary errors are detected following entering the sync state (column 11, lines 21-25 and column 11, lines 27-32).

Regarding claim 7, LOO teaches that identifying an additional N boundaries comprises identifying additional boundaries based on the determined statically varying packet size (column 11, lines 21-25).

Regarding claim 8, LOO teaches a method for automatically adapting to statically varying packet size, the method comprising: identifying a first boundary based on a header value (column 10, lines 31-32 and column 11, lines 1-3 ; cell 10 of Fig. 1A corresponds to the claimed first boundary); identifying a second boundary based on a header value (column 11, lines 3-8; cell 11 of Fig. 1A corresponds to the second boundary); counting a number of bytes between the first and second boundaries to determine the statically varying packet size (column 11, lines 17-19 and column 8, lines

29-32); identifying an additional N boundaries separated by the determined packet size

(column 11,lines 21-25); entering a sync state based on the identification of the

additional N boundaries (column 11, lines 5-8); and tracking boundary errors in the sync

state to determine when synchronization is lost (column 11,lines 21-25 and column 11,

lines 27-32).

Regarding claim 9, Loo teaches a method for automatically adapting to statically

varying packet size (Figs 1-3), the method comprising: receiving a stream of bytes over

a physical medium (column 11, lines 1-2); determining a static packet size from the

bytes in the stream of bytes (column 11, lines 21-25); and using the determined packet

size to process packets from the received byte stream (column 11, lines 22-25).

Regarding claim 10, LOO teaches that determining a packet size comprises

identifying first and second boundaries of a packet based on bytes in the received

stream of bytes (column 11, lines 21-25).

Claim 11 is met as previously discussed with respect to claim 8.

Regarding claim 12, Loo teaches that determining a packet size further

comprises identifying N additional boundaries separated by the same number of bytes

(column 11, lines 21-25).

Regarding claim 13, LOO teaches re-determining the packet size after a selected

number of errors in the processing of packets (column).

Regarding claim 15, LOO teaches a method for automatically adapting to statically

varying packet size, the method (Figs. 1-3) comprising:

receiving a stream of bytes (column 8,lines 12-14); identifying an expected packet size

based on the received bytes (column 10, lines 31-32 and column 11,lines 1-3); counting

N additional packets that match the expected packet size (column 11, lines 17-19 and

column 8,lines 29-32);

entering a sync state based on receiving the N additional packets (column 11, lines 5-

8); monitoring packet size of packets received in the sync state (column 11,lines 21-25

and column 11,lines 27-32); and when M packets vary from the expected packet size,

exiting the sync state (column 11, lines 21-25).

Regarding claim 16, LOO teaches that the N additional packets comprise N

consecutive packets (column 8, lines 1-6).

Regarding claim 17, LOO teaches that the M packets comprise M consecutive

packets (column 8, lines 1-6).

Regarding claim 18, LOO teaches that identifying an expected packet size comprises

identifying an expected packet size from consecutive packet boundaries (column 10,

lines 31-32 and column 11, lines 1-3).

Regarding claim 19, LOO teaches that identifying packet boundaries comprises

calculating header error check values and comparing the calculated values with a byte

of data in the stream of bytes (column 8, lines 1-27).

Claim 26 is met as previously discussed with respect to claim 15.

Claim 27 is met as previously discussed with respect to claim 16.

Claim 28 is met as previously discussed with respect to claim 17

Claim 29 is met as previously discussed with respect to claim 18

Claim 30 is met as previously discussed with respect to claim 19.

Claim 31 is met as previously discussed with respect to claim 9 .

Claim 32 is met as previously discussed with respect to claim 8.

Claim 33 is met as previously discussed with respect to claim 8.

Claim 34 is met as previously discussed with respect to claim 8.

Claim 35 is met as previously discussed with respect to claim 13.

Claim 36 is met as previously discussed with respect to claim 1.

Claim 37 is met as previously discussed with respect to claim 2 .

Claim 38 is met as previously discussed with respect to claim 3.

Claim 39 is met as previously discussed with respect to claim 4.

Claim 40 is met as previously discussed with respect to claim 5.

Claim 41 is met as previously discussed with respect to claim 6.

Claim 42 is met as previously discussed with respect to claim 7.

Allowable Subject Matter

2.   Claims 14, 20-25, 43-47 are allowable.

The following is a statement of reasons for the indication of allowable subject

matter: As to claim 14, the prior art of record does not teach counting bytes after the

first boundary is identified without exceeding a selected number of bytes. As to claims 20-25, the prior art of record does not teach a first transmission convergence layer associated with the first packet-based communication device and a second transmission convergence layer associated with the second packet-based communication device, the first and second transmission convergence layers configured to automatically adapt to a statically varying packet size based on packets received at the respective first and second packet-based communication devices. As to claims 43-47, the prior art of record does not teach

a synchronization circuit, responsive to the signal indicating the next boundary and the signal indicating the expected next boundary,that is adapted to count N consecutive valid boundaries to enter a sync state and to count M consecutive missed boundaries to exit the sync state.

Conclusion

3.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Boakye whose telephone number is (571) 272-3183. The examiner can normally be reached on M-F from 8:30am to 6:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham, can be reached on (571) 272-3179. The Fax number is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or PUBLIC PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Any

inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the **Electronic Business Center (EBC)** numbers at 866-217-

9197 and 703-305-3028.

Alexander Boakye

Patent Examiner
AB
01/05/08

CHI PHAM
SUPERVISORY PATENT EXAMINER
1/7/08